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10/002,699	10/31/2001	Drake Christensen	10257/14	2757

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EXAMINER
TRUONG, CAM Y T

ART UNIT	PAPER NUMBER
2172	

DATE MAILED: 08/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	10/002,699	CHRISTENSEN ET AL.
	Examiner	Art Unit	
	Cam Y T Truong	2172	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☐ Responsive to communication(s) filed on _____.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-23* is/are pending in the application.
   4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) *1-23* is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on <u>29 January 2002</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All b)☐ Some * c)☐ None of:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. _____.
    3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
   Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1.   Claims 1-23 are pending in this Office Action.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for

all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a
> person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived
> by the manner in which the invention was made.

3.   Claims 1, 4, 5, 7-12, 15-16, 19-23, are rejected under 35 U.S.C. 103(a) as

being unpatentable over Richard et al (or hereinafter "Richard") (USP 6162060)

in view of Helgeson et al (or hereinafter "Helgeson") (USP 6643652).

As to claim 1, teaches the claimed limitations:

"establishing a first database comprising enrollment data in a first format"

as databases store enrollment information, charges for course, and locations for

course version. This information implies that there is a first database to store

enrollment information in it's own format (col. 4, lines 45-50);

"establishing a second database comprising administrative data in a

second format" the repository 104 that include a database to store all courses in

either text or graphic format. Since the authoring system 124 provide a

mechanism to allow authors to put string variable operations into courses and

incorporates an editing facility which allows for global search and replace of text

strings, graphic images, etc. for entire course; thus, the courses are presented as

administrative data. The database of repository is represented as a second

database (col. 8, lines 43-47; col. 4, line 67; col. 14, lines 50-54);

"and transferring converted enrollment data in the second format from the

first database to the second database" as transferring information concerning

course enrollment from the servers to a main repository that includes a database.

The authoring system 124 provides a mechanism to allow authors to put string

variable operations into courses and incorporates an editing facility which allows

for global search and replace of text strings, graphic images, etc. for entire

course. The above information indicates the courses can be converted from one

format to another format. Thus, the transferred enrollment course can be a

converted enrollment course (col. 2, lines 25-30; col. 8, lines 43-47).

Richard does not explicitly teach the claimed limitation "converting the

enrollment data from the first format to the second format upon enroll detection of

a new enrollment of at least one student in a course". Helgeson teaches that

when a new employee is added to or terminated from the third party HR system

database 1749, the monitor 1757 located on the third party interconnect

backplane 1753 notifies the subscriber 1745 located on the SABA interconnect

backplane 1739 via XML 1759. The accessor 1743 on the SABA interconnect

backplane 1739 can then access the new employee data via XML. The

Interconnect server 1725 then performs style sheet transformations to convert

the XML into the Platform's native format and transmits that data to the

Business server 1727 which then updates the database management system

1713. This data connection can be set to be automatic or with modifications

(col. 135, lines 59-67; col. 136, lines 1-5).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Helgeson's teaching of converting the XML of new employee into the Platform's native format and transmitting that data to the server 1727 into Richard's system in order to allow a user can view or read new data and to store new data in new database with correct format.

As to claim 4, Richard teaches the claimed limitation "wherein the transferring of converted enrollment data is transferred over a communications network from the first database to the second database" as transferring information concerning course enrollment from the servers to a main repository that includes a database via network. The authoring system 124 provide a mechanism to allow authors to put string variable operations into courses and incorporates an editing facility which allows for global search and replace of text strings, graphic images, etc. for entire course; thus the transferred enrollment course can be an converted enrollment course (col. 2, lines 24-30; col. 8, lines 43-47).

As to claim 5, Richard teaches the claimed limitation "transferring the converted administrative data in the first format from the second database to the first database" as (col. 2, lines 24-30, col. 8, lines 43-47). Richard does not explicitly teach the claimed limitation "converting administrative data from the second format to the first format upon an occurrence of a triggering update of the second database". Helgeson teaches the ImporterWriter 960 is responsible for

(1) Establishing a connection into the system based on the User Id and

Credentials (2) Mapping the single XML document received to one or more

objects required to be inserted into the native system (3) Converting the Native

XML representation of the object into native system specific format (4) Based on

the event to be performed, insert, update or delete the database (5) In case of a

new object being inserted, returning the local identifier for the object inserted (6)

Providing a clean shutdown by closing the connection (col. 92, lines 20-30).

It would have been obvious to a person of an ordinary skill in the art at the

time the invention was made to apply Helgeson's teaching of Mapping the single

XML document received to one or more objects required to be inserted into the

native system (3) Converting the Native XML representation of the object into

native system specific format (4) Based on the event to be performed, insert,

update or delete the database (5) to Richard's system in order to store new data

in a database with correct format.

As to claims 7 and 19, Richard teaches the claimed limitation "the

assignment of at least one of a student and an instructor to an electronic course"

as assignment Jack Decker a master instructor and James Dinn a student to a

course VMS (fig. 2)

As to claim 8, "receiving at least one of updated student information" as

(col. 6, lines 35-37), "updated instructor information" as a course is created by

an author. Thus, when the author edits courses, the system implies updating author course. Author is presented as an instructor (col. 11, lines 15-25).

As to claim 9, Richard teaches the claimed limitation "accessing the first database to determine if a student is qualified to enroll in a corresponding course" as (col. 9, lines 39-42).

As to claim 10, Richard and teaches the claimed limitation "accessing the second database to assign an instructor and a student to an electronic course" as all courses are stored in database of repository 104. When the system provides the student with information such as which is next course in a sequence of course and author selects the edit course for updating course, it indicates that the system accesses the database of repository 104 to assign an author and a student to an course (col. 4, lines 64-67; col. 12, lines 20-24, col. 11, lines 20-25; col. 14, lines 50-55).

As to claim 11, Richard teaches the claimed limitation "delivering at least a portion of a content of the electronic course to an enrolled student" as (col. 11, lines 60-67; col. 12, lines 1-15; col. 9, lines 39-42).

As to claim 12, Richard teaches the claimed limitations:

"a first database containing enrollment data in a first format" as databases store enrollment information, charges for course, and locations for course

version. This information implies that there is a first database to store enrollment

information in it's own format (col. 4, lines 45-50);

"a second database containing administrative data in a second format" the

repository 104 that include a database to store all courses in either text or

graphic format. Since the authoring system 124 provide a mechanism to allow

authors to put string variable operations into courses and incorporates an editing

facility which allows for global search and replace of text strings, graphic images,

etc. for entire course; thus, the courses are presented as administrative data.

The database of repository is represented as a second database (col. 8, lines 43-

47; col. 4, line 67; col. 14, lines 50-54);

"and a data transfer interface for transferring converted enrollment data in

the second format from the first database to the second database" as transferring

information concerning course enrollment from the servers to a main repository

that includes a database. The authoring system 124 provide a mechanism to

allow authors to put string variable operations into courses and incorporates an

editing facility which allows for global search and replace of text strings, graphic

images, etc. for entire course. This information indicates the courses can be

converted from one format to another format. Thus, the transferred enrollment

course can be a converted enrollment course. The above information shows that

the system has included an interface to can transfer course enrollment from the

servers to a main repository (col. 2, lines 25-30; col. 8, lines 43-47).

Richard does not explicitly teach the claimed limitation "a first converter for

converting the enrollment data from the first format to the second format upon

detection of a new enrollment of at least one student in a course". Helgeson

teaches that when a new employee is added to or terminated from the third party

HR system database 1749, the monitor 1757 located on the third party

interconnect backplane 1753 notifies the subscriber 1745 located on the SABA

interconnect backplane 1739 via XML 1759. The accessor 1743 on the SABA

interconnect backplane 1739 can then access the new employee data via XML.

The Interconnect server 1725 then performs style sheet transformations to

convert the XML into the Platform's native format and transmits that data to the

Business server 1727, which then updates the database management system

1713. This data connection can be set to be automatic or with modifications.

The above information implies that the system has included a converter to

convert the XML into the Platform's native format (col. 135, lines 59-67; col. 136,

lines 1-5).

It would have been obvious to a person of an ordinary skill in the art at the

time the invention was made to apply Helgeson's teaching of converting the XML

of new employee into the Platform's native format and transmitting that data to

the server 1727 into Richard's system in order to allow a user can view or read

new data and to store new data in new database with correct format.

As to claim 15, Richard teaches the claimed limitation "a communications

network arranged to transfer the converted enrollment data from the first

database to the second database via the first converter" as transferring

information concerning course enrollment from the servers to a main repository

that includes a database via network. The authoring system 124 provide a

mechanism to allow authors to put string variable operations into courses and

incorporates an editing facility which allows for global search and replace of text

strings, graphic images, etc. for entire course. This information indicates the

courses can be converted from one format to another format. Thus, the

transferred enrollment course can be a converted enrollment course (col. 2,

lines 25-30; col. 8, lines 43-47).

As to claim 16, Richard does not explicitly teach the claimed limitation "a

second converter for converting administrative data from the second format to

the first format upon an occurrence of a triggering update of the second

database". Helgeson teaches the ImporterWriter 960 is responsible for (1)

Establishing a connection into the system based on the User Id and Credentials

(2) Mapping the single XML document received to one or more objects required

to be inserted into the native system (3) Converting the Native XML

representation of the object into native system specific format (4) Based on the

event to be performed, insert, update or delete the database (5) In case of a new

object being inserted, returning the local identifier for the object inserted (6)

Providing a clean shutdown by closing the connection. The above information

indicates the system has included a converter to convert the native XML of the

object into another format (col. 92, lines 20-30).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Helgeson's teaching of Mapping the single XML document received to one or more objects required to be inserted into the native system (3) Converting the Native XML representation of the object into native system specific format (4) Based on the event to be performed, insert, update or delete the database (5) to Richard's system in order to store new data in a database with correct format.

As to claim 20, Richard teaches the claimed limitation "a receipt of at least one of updated student information" as (col. 6, lines 35-37), "updated instructor information" as a course is created by an author. Thus, when the author edits courses, the system implies updating author course. Author is presented as an instructor (col. 11, lines 15-25).

As to claim 21, Richard teaches the claimed limitation "an enrollment module accessing the first database to determine if a student is qualified to enroll in a corresponding course" as (col. 9, lines 40-45).

As to claim 22, Richard teaches the claimed limitation " a course assignment module for accessing the second database to assign an instructor and a student to an electronic course" as assignment Jack Decker a master instructor and James Dinn a student to a course VMS. A course is stored in a database of repository. Thus, when assigning an instructor and a student to a

course, the system has to access the database of repository (fig. 2, col. 4, lines 42-67).

As to claim 23, Richard teaches the claimed limitation "a course delivery module for delivering at least a portion of a content of the electronic course to an enrolled student" as allowing the student to navigate through the course and to ask the student questions about the subject matter of the course. This information shows that the system has included a course delivery module for delivering

4.   Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richard et al (or hereinafter "Richard") (USP 6162060) in view of Helgeson et al (or hereinafter "Helgeson") (USP 6643652) and further in view of Walker et al (or hereinafter "Walker") (USP 6088686).

As to claim 2, Richard and Helgeson disclose the claimed limitation subject matter in claim1, except the claimed limitation "verifying financial information on the enrollment of the at least one student". Walker teaches that verification requirements are created or generated after full review of the credit application and subsequent conditional approval. In another advantageous implementation of the present invention, systematically driven verifications categories based on the amount offered and the amount accepted are detailed within the front-end process, identifying to the LBR any and all verification requirements--thus enabling fulfillment of required verifications during the initial

session, provided the applicant has the information available (e.g., identification,

phone, employment, income, etc.). This applicant is presented as a student

(col. 3, lines 5-18).

It would have been obvious to a person of an ordinary skill in the art at the

time the invention was made to apply Walker's teaching of verification income of

an new applicant to Richard and Helgeson's system in order to make sure that

students can pay their institutions or eliminate students who have bad financial

to register courses.

As to claim 3, Richard and Helgeson disclose the claimed limitation

subject matter in claim1, except the claimed limitation "authorizing credit

account data of the at least one student". Walker teaches that after all the

verification requirements have been satisfied to allow the subsequent new

account opening functionalities to be automatically performed, thus ensuring

compliance with the verification requirements. Account includes financial. The

above information shows that when the verification requirement to allow the new

account to be opened, the system authorizes account financial of the new

customer. The financial of account is represented as credit account data (col. 3,

lines 5-18; col. 8, lines 60-65).

It would have been obvious to a person of an ordinary skill in the art at the

time the invention was made to apply Walker's teaching of after all the

verification requirements have been satisfied to allow the subsequent new

account opening functionalities to be automatically performed, thus ensuring

compliance with the verification requirements to Richard's system and

Helgeson's system in order to potentially avoid fraud issues.

5.   Claims 6 and 17-18 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Richard et al (or hereinafter "Richard") (USP 6162060) in view

of Helgeson et al (or hereinafter "Helgeson") (USP 6643652) and further in view

of Jones et al (or hereinafter "Jones") (USP 6513068).

As to claims 6 and 18, Richard and Helgeson discloses the claimed

limitation subject matter in claim 1, except the claimed limitation "wherein the

transferring of converted administrative data is transferred over a

communications network from the second database to the first database".

Helgeson teaches converting the XML into the Platform's native format as

discussed in claim 1. Jones teaches transferring of the bi-directional data stream

between the client computer and the server (col. 4, lines 64-67, fig. 5).

It would have been obvious to a person of an ordinary skill in the art at the

time the invention was made to apply Jones' teaching of transferring of the bi-

directional data stream between the client computer and the server to Richard

and Helgeson in order to synchronization data between two system correctly or

update data between two site correctly.

As to claim 17, Richard and Helgeson discloses the claimed limitation

subject matter in claim 12, except the claimed limitation "wherein the data

transfer interface is arranged to transfer the converted administrative data in the

first format from the second database to the first database". Jones teaches

transferring of the bi-directional data stream between the client computer and the

server. The above information shows that the system has included a transfer

interface to transferring data stream between the client computer and the server

computer or the server to client (col. 4, lines 64-67, fig. 5).

It would have been obvious to a person of an ordinary skill in the art at the

time the invention was made to apply Jones' teaching of transferring of the bi-

directional data stream between the client computer and the server to Richard

and Helgeson in order to synchronization data between two system correctly or

update data between two site correctly.

6.   Claims 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Richard et al (or hereinafter "Richard") (USP 6162060) in view of Helgeson

et al (or hereinafter "Helgeson") (USP 6643652) and further in view of Lacy et al

(or hereinafter "Lacy") (USP 6016335).

As to claim 13, Richard and Helgeson discloses the claimed limitation

subject matter in claim 12, except the claimed limitation "an enrollment manager

for determining whether to enroll in the at least one student in an electronic

course based on at least one of student data and financial data; a coordinator

for detecting the new enrollment after the enrollment manager determines

compliance of at least one of the student data and financial data with a

requirement of the educational institution". Lacy teaches that if the student

chooses registration 40, an elaborate series of routines execute. First is a hold

check routine that executes to determine if the student has failed to meet certain institutional requirements. For example, before registration, the student is then passed to a routine 164 to determine if the student has paid any property deposits required by law or by the institution. Property deposits are required to reimburse the institution for breakable and losable supplies used by students. In the routine 164, the host computer 24 or the computer 18 is queried to determine if the student had paid the property deposit in the past. In step 166, any current charges against the property deposit are accounted for by deducting the current balance from the amount required and, in step 168, the balance is added to the student's bill. In step 170, the student is told the amount of the bill for tuition, plus any fees and the property deposit. In step 172, the student is asked whether the bill is going to be paid by mail and, if the student answers yes, the student is told in step 174 to send a check to the bursar's address and the registration process is completed in an ending routine 176 (col. 7, lines 25-50; col. 3, lines 53-60). Lacy also teaches that these systems collect all the registrations occurring in one day into a batch, process the batch in the evening and thus provide reports the next morning on the preceding day's activity. In accordance with this invention, reports can be generated upon demand by a department administrator to show how many students have registered for the courses offered by the department or such reports can be generated at predetermined times or intervals, e.g. at noon and 5 p.m. Department administrator is represented as a coordinator (col. 9, lines 45-55).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Lacy's teaching of before registration, the student is then passed to a routine 164 to determine if the student has paid any property deposits required by law or by the institution and department administrator detects how may students have registered for courses to Richard's system and Helgeson's system in order to prevent bad student to register class without efficient financial.

As to claim 14, Richard and Helgeson discloses the claimed limitation subject matter in claim 12, "a financial module for determining whether received financial information of the student complies with a requirement of the educational institution; a coordinator for detecting the new enrollment after the enrollment manager verifies the financial data of the at least one new student". Lacy teaches that if the student chooses registration 40, an elaborate series of routines execute. First is a hold check routine that executes to determine if the student has failed to meet certain institutional requirements. For example, before registration, the student is then passed to a routine 164 to determine if the student has paid any property deposits required by law or by the institution. Property deposits are required to reimburse the institution for breakable and losable supplies used by students. In the routine 164, the host computer 24 or the computer 18 is queried to determine if the student had paid the property deposit in the past. In step 166, any current charges against the property deposit are accounted for by deducting the current balance from the amount

required and, in step 168, the balance is added to the student's bill.   In step

170, the student is told the amount of the bill for tuition, plus any fees and the

property deposit. In step 172, the student is asked whether the bill is going to

be paid by mail and, if the student answers yes, the student is told in step 174 to

send a check to the bursar's address and the registration process is completed

in an ending routine176. This information indicates that the system has included

a financial module for determining whether received financial information of

student complies with a requirement of the education institution (col. 7, lines 25-

50; col. 3, lines 53-60). Lacy also teaches these systems collect all the

registrations occurring in one day into a batch, process the batch in the evening

and thus provide reports the next morning on the preceding day's activity. In

accordance with this invention, reports can be generated upon demand by a

department administrator to show how many students have registered for the

courses offered by the department or such reports can be generated at

predetermined times or intervals, e.g. at noon and 5 p.m. Department

administrator is represented as a coordinator (col. 9, lines 45-55).

It would have been obvious to a person of an ordinary skill in the art at the

time the invention was made to apply Lacy's teaching of before registration, the

student is then passed to a routine 164 to determine if the student has paid any

property deposits required by law or by the institution and department

administrator detects how may students have registered for courses to Richard's

system and Helgeson's system in order to prevent bad student to register class

without efficient financial.

Conclusion

7.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

Cook et al (USP 6201948).

Contact Information

8.   Any inquiry concerning this communication or earlier communications from

the examiner should be directed to Cam-Y Truong whose telephone number is

(703-605-1169). The examiner can normally be reached on Mon-Fri from

8:00AM to 4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the

examiner's supervisor, John Breene, can be reached on (703-305-9790). The

fax phone numbers for the organization where this application or proceeding is

assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application

or proceeding should be directed to the receptionist whose telephone number is

(703-305-3900).

Cam-Y Truong

3/1/04

JOHN BREENE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100